Unplugged client-server network

# Introduction

For this activity, each person in your group will play a role in a client-server network. You will be responsible for requesting jobs and fulfilling requests for other computers in the network.

Task 1 .Define roles

1. In your group of 3 or 4, give each person a **role** from the table below:

| **Group member** | **Role** |
| --- | --- |
| 1 | Server |
| 2 | Office worker 1’s computer |
| 3 | Office worker 2’s computer |
| 4 (optional) | Office worker 3’s computer |

1. Use the **sticky labels** and a **pen** to ensure that each person in your group is **clearly labelled** with their role.

Task 2 Distribute cards

1. Give each member of the group the **Role card** that matches their role. The role cards are the larger cards labelled “Role card”.
2. Give each member the **Request** and **Response** cards that belong to them.



1. Each member of the group should display their cards clearly in front of them to make it easy to keep track of their cards.

Task 3 The scenarios

You will complete the first scenario with your teacher. There are two further scenarios written below. For each scenario, each member of the group is responsible for requesting tasks and responding to tasks assigned to them. Cards should move around members of the group as tasks are requested and responded to. Lay cards face down once they have been fulfilled.

After the scenarios, reflect on the advantages and disadvantages for sharing resources in this way.

**Note:** Only complete office worker 3 tasks if you have a fourth member in your group.

**Scenario two**

1. **Office worker 1** sends a request for the file **Company\_logo.png**
2. **Server** receives the request and sends the file **Company\_logo.png**
3. **Office workers 1**, **2**,and (optional)  **3** place print requests for their files
4. **Server** processes all requests; remember that only one print can happen at a time

**Scenario three**

1. **Office worker 2** requests the file **Customer\_database.db**
2. **Server** receives the request and sends the file **Customer\_database.db**
3. An **error** is detected on the **server** and it has shutdown
4. **Office worker 1** sends a print request for the file **Welcome\_letter.doc**
5. **Server** doesn’t receive the request as it is shut down, print isn’t actioned
6. (Optional) **Office worker 3** sends a request for the file **Website\_animation.gif**
7. (Optional) **Server** does not receive the request as it is shut down, file is not sent

Task 4 Reflection

*What were the advantages of sharing resources in this way?*

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*What were the disadvantages?*

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